Feed the Future Country Fact Sheet

Online Version: https://www.feedthefuture.gov/article/support-university-partners-technology-unlocks-commercial-potential-agriculture-senegal

With Support from University Partners, Technology Unlocks Commercial Potential of Agriculture in Senegal

Zack Taylor/USAID

Small business owners working to transform raw products into commercial goods display their wares with Bineta Guisse of USAID (right).

In Senegal, Feed the Future is connecting national agricultural research institutions with U.S. universities in order to better meet demand for the applied research businesses need to transform raw agricultural products into commodities that can be sold on the market.

That process of transformation, known as agro-processing, is a key business activity and a major driver for economic development in Senegal. That's why a Feed the Future program managed by USAID is facilitating collaboration between Senegal's Food Technology Institute (or ITA, a government research center for applied food science), and Tuskegee University in Alabama to disseminate technologies on using sweet potatoes in commercial food products. Tuskegee is part of **a coalition** of five U.S. universities led by Virginia Tech that is working to strengthen Senegal's agricultural education sector.

At a recent technology transfer training and workshop at Tuskegee University, ITA researchers learned advanced techniques for using sweet potatoes, which are widely available in Senegal, as a sweetener for beverages made with native Senegalese fruits. ITA researchers also learned that they can cut baking costs in half by using up to 50 percent local sweet potato flour in place of wheat flour in bread production.

"This is an extraordinary discovery because ITA previously has not been able to incorporate sweet potato flour beyond a rate of 15 percent," says Fallou Sarr, head of the Cereals and Legumes Laboratory at ITA. "This method will not only spur increased sweet potato production, but also significantly lower costs incurred by importing wheat." Senegal currently imports 90 percent of its wheat flour supply from abroad.

The workshop at Tuskegee University is just one example of how new agricultural and food science technologies can equip researchers in developing countries to help boost local and national economies. Agro-processing companies of all sizes can benefit from the results of applied research activities with sound economic potential, and many small business organizations in Senegal, including a variety of women's cooperatives, are seeking more opportunities to be trained in food processing, packaging, and quality assurance.

In order to extend the benefits of new research to rural communities in Senegal, this Feed the Future program is also working with the University of Ziguinchor in Senegal's restive Casamance region to train women's groups on processing technology

for fruits, vegetables and grains, as well as business organization and financial management. Casamance is an isolated but highly fertile part of the country where using local crops like sweet potatoes to create value-added food products represents a key opportunity for small enterprises to emerge from decades of civil unrest and economic hardship. Feed the Future aims to help these businesses export “transformed” products to external markets in order to buoy Casamance’s stagnant economy

Under Feed the Future, USAID also supports ITA’s outreach to agribusiness, farmers and small entrepreneurs across the country by providing equipment grants to upgrade ITA’s research laboratories, computing, and other technical capabilities. The program has also helped train technical staff in Senegal as well as other parts of Africa and the United States, leading to increased competence on techniques for conservation, processing, and optimizing nutrition in local cereals.